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Heraclitus on Pythagoras

By the time of Heraclitus, criticism of one's predecessors and contemporaries had long been an established literary tradition. It had been successfully practiced since Hesiod by many poets and prose writers.¹ No one, however, practiced criticism in the form of persistent and methodical attacks on both previous and current intellectual traditions as effectively as Heraclitus. Indeed, his biting criticism was a part of his philosophical method and, on an even deeper level, of his self-appraisal and self-understanding, since he alone pretended to know the correct way to understand the underlying reality, unattainable even for the wisest men of Greece. Of all the celebrities figuring in Heraclitus' fragments only Bias, one of the Seven Sages, is mentioned approvingly (DK 22 B 39), while another Sage, Thales, is the only one mentioned neutrally, as an astronomer (DK 22 B 38). All the others named by Heraclitus, which is to say the three most famous poets, Homer, Hesiod and Archilochus, the philosophical poet Xenophanes, Pythagoras, widely known for his manifold wisdom, and finally, the historian and geographer Hecataeus – are given their share of opprobrium.²

Despite all the intensity of Heraclitus' attacks on these famous individuals, one cannot say that there was much personal in them. He was not engaged in ordinary polemics with his contemporaries, as for example Xenophanes, Simonides or Pindar were.³ Xenophanes and Hecataeus, who were alive when his book was written, appear only once in his fragments, and even then only in the company of two more famous people, Hesiod and Pythagoras (DK 22 B 40). His fundamental complaints were directed against illustrious men of the distant and recent past, and in those cases where the grounds for those complaints are formulated or at least reconstructable, they are of a predominantly philosophical, or to be more precise, epistemological character. Heraclitus tries to assure his readers that he knows the truth which the others only pretend to know. From such a point of view it is quite natural that his main targets were Homer and Hesiod, known as the teachers of Greece. Both poets are mentioned three times, though Homer once in a seemingly neutral yet unclear context: he is simply called an astronomer (DK 22

¹ Zajcev 1993, 149–153.

² Babut 1976.

³ Zajcev 1993, 150–152.

B 105). In fragment DK 22 B 56 an epistemological charge can be very clearly identified: “Men are mistaken as regards the knowledge of the visible things, in the same way as Homer, who was wiser than all the Greeks”.⁴ In spite of being the wisest of the Greeks, Homer still lacks the insight needed to apprehend reality, for he was not even able to solve a riddle posed to him by children. Thus, his wisdom is only seeming.⁵ Criticism of the same kind is directed against Hesiod in fragment DK 22 B 57. He is the teacher of most people and they are sure that he knew most things, yet he did not recognize that day and night are one. Indeed, Hesiod was unaware of Heraclitus’ doctrine on the unity of the opposing powers, so his pretensions to be a master of truth are shallow.⁶ There is also a similar fragment on lucky and unlucky days (DK 22 B 106), though in this case it is not clear whether Hesiod was in fact mentioned by Heraclitus.⁷ If he was, this does not add anything substantial to his portrait by Heraclitus; if he was not, this reduces his presence from three to two fragments.

In the last case it turns out that the main object of Heraclitus’ attacks was Pythagoras, for he appears in three fragments, once with the other polymaths, and twice as the sole object of criticism. The force and variety of Heraclitus’ attacks on Pythagoras demonstrates that he possibly saw him as being his chief rival in pretensions to wisdom. Since Pythagoras lived in Croton in southern Italy and did not leave any writing behind, his fame by the time of his death (*ca.* 490-s) must have been so well established and widely spread that in Heraclitus’ eyes he could easily compete with the greatest Greek poets and teachers. But precisely because Pythagoras wrote nothing, we know far less about his activities than about Hesiod, Xenophanes and Hecataeus. Heraclitus probably knew more about Pythagoras, but in order to understand him we need to compare his words with what we know about Pythagoras, and this is quite problematic. The wide variety of interpretations produced in the last century arises not so much from the constantly changing views on Heraclitus as from the changing views on Pythagoras. One of the trends is to replace an old image of Pythagoras the philosopher and scientist with a purely religious figure, whose reflection must be found in Heraclitus’ text. Another difficulty is that our three fragments contain an unusual concentration of words which are either coined by Heraclitus himself, such as *πολυμαθῆ*, and possibly *κακοτεχνίη*, or appear for the first time in his book,

⁴ Unless otherwise stated, translations are my own.

⁵ Marcovich 1967/2001, 81–83; Babut 1976, 469–474; Kahn 1979, 111–112.

⁶ Babut 1976, 480–481.

⁷ Marcovich 1967/2001, 321; cf. Babut 1976, 482–486.

such as ἱστορίη, συγγραφαί and κοπίδες. All this widens the spectrum of possible interpretations, though luckily it does not make it endlessly extendable.

Let me start with the shortest of these fragments, DK 22 B 81, in which Heraclitus calls Pythagoras κοπίδων ἀρχηγός. This is rendered either as ‘chief of swindlers’⁸ or as ‘originator, ancestor of swindles’,⁹ because the genitive plural κοπίδων can be regarded as derived either from κόπις or from κοπίς. Κόπις denoted a speaker who could sway an audience with artful, but deceitful words. Euripides calls Odysseus ὁ ποικιλόφρων κόπις ἡδυλόγος δημοχαριστὴς Λαερτιάδης (*Hec.* 131 f.). In the Byzantine dictionaries κόπις is explained as ὁ λαλός, ὁ ῥήτωρ (*Suda*) or as ὁ δημοκόπος καὶ κόβαλος (*Etym. Gudian.*). If κοπίδων refers to such people, then Heraclitus would have had in mind both Pythagoras, as an arch-cheater, and the Pythagoreans, who also deceived people with their mendacious speeches, the ‘teachers of lies’.¹⁰ This is possible, although a reference to Pythagoras coupled with Pythagoreans would be unique in the fifth century. Besides, there is no evidence that the Pythagoreans were renowned as powerful speakers, although Pythagoras certainly was.

On the other hand, the word κοπίδες, the plural of κοπίς (a kind of knife) refers not to liars themselves, but to their deceitful speeches: κοπίδας δὲ τὰς τῶν λόγων τέχνας.¹¹ This is how I think both sources of fragment DK 22 B 81 understood κοπίδων. Philodemus in the *Rhetoric*, quoting Heraclitus, calls rhetoric (and not Pythagoras!) κοπίδων ἀρχηγός, i. e. either “the originator of swindles” or “chief of swindlers”. Timaeus of Tauromenium, defending Pythagoras, makes the first variant more plausible, for he says: thus, it appears that not Pythagoras was the inventor of real swindles (ὥστε καὶ φαίνεσθαι μὴ τὸν Πυθαγόραν εὐρ<ετὴν γεν>όμενον τῶν ἀληθινῶν κοπίδων) but his accuser Heraclitus was the liar (FGrHist 566 F 132 = DK 22 B 81)! A Hellenistic pseudo-Pythagorean tradition reacted to this debate by producing Pythagoras’ own book Κοπίδες.¹² All this imparts more plausibility to the interpretation, shared by H. Diels and other scholars, which makes Pythagoras the sole target of Heraclitus: ‘originator, ancestor of swindles’.¹³ Marcovich’s objection that there were liars long before Pythagoras,

⁸ Burkert 1972, 161; Kahn 1979, 41: “prince of impostors”; Marcovich 1967/2001, 72: “chief captain of cheaters”.

⁹ DK: “Ahnherren der Schwindeleien (Schwindler)”; LSJ, s.v. ἀρχηγός II.3: “first cause, originator κοπίδων”.

¹⁰ So Marcovich 1967/2001, 71.

¹¹ *Schol. Eur. Hek.* 131 = DK 22 B 81.

¹² Diog. Laert. 8, 8; Diels 1890.

¹³ For a challenging new interpretation which makes rhetoric and not Pythagoras the sole target of DK 22 B 81, see Vassallo 2015. Cf., however, Erbì 2010.

e. g. Homer and Hesiod,¹⁴ does not seem conclusive: first, Heraclitus does not call the poets ‘liars’, secondly, ‘swindles’ most probably refers to the speeches of Pythagoras, who addressed his audience directly.

The tradition of Pythagoras’ speeches having been given to various groups of the Crotoniates is attested by the Socratic Antisthenes, and then by Dicaearchus (fr. 33) and Timaeus (ap. Iust. 20.4). In his comment on the Homeric epithet πολύτροπος, characterizing the wise and eloquent Odysseus, Antisthenes uses for comparison Pythagoras’ ability to speak differently with different social and age groups, such as women and children, for example, seeing in it proof of his wisdom (fr. 51 Decleva Caizzi). But Heraclitus, who had earned the nickname ‘the mob-reviler’ (ὄχλολοῖδορος, Diog. Laert. 9.6), was unlikely to admire a person trying to persuade his co-citizens of something, not least women and children. We know very little of the content of Pythagoras’ speeches, though one conspicuous topic seemed to be the struggle with τρυφή and immoderation in general.¹⁵ This attitude was not alien to Heraclitus himself, but there was no obstacle to him attacking people whose ideas he shared, whilst at the same time refusing to acknowledge their wisdom. In fact, we can only guess what specifically Heraclitus has in mind in condemning Pythagoras’ ‘swindles’. Though it is tempting to suggest here Pythagoras’ religious teaching, no classical source connects his speeches with anything religious. The fragment DK 22 B 28, “Justice will catch up with those who invent lies and those who swear to them”,¹⁶ which some commentators relate to Pythagoras and his followers,¹⁷ seems too general in its claim to be convincingly connected either with metempsychosis or with Pythagoras. The two other fragments mentioning Pythagoras might clarify the background of Heraclitus’ criticism.

“Much learning does not teach understanding; otherwise it would have taught Hesiod and Pythagoras, and also Xenophanes and Hecataeus”.¹⁸ This is fragment DK 22 B 40. Πολυμαθίη, which also figures in fragment DK 22 B 129, directed against Pythagoras alone, and the names, among which he is mentioned, show that the claims of Heraclitus are of an epistemological nature,¹⁹ as those related to Homer and Hesiod individually. Even if Hesiod knew most things (πλεῖστα εἰδέναι), he did not understand what he should have understood (DK 22

¹⁴ Marcovich 1967/2001, 72–73.

¹⁵ Zhmud 2012, 93, 200 n. 120–121.

¹⁶ Trans. Charles H. Kahn.

¹⁷ Marcovich 1967/2001, 76–77; Conche 1986, 216.

¹⁸ Πολυμαθίη νόον ἔχειν οὐ διδάσκει· Ἡσίοδον γάρ ἂν ἐδίδαξε καὶ Πυθαγόρην αὐτίς τε Ξενοφάνεά τε καὶ Ἑκαταῖον.

¹⁹ Marcovich 1967/2001, 59–60, 64–66; Conche 1986, 91–92.

B 57). It is from this standpoint that Heraclitus juxtaposes the author of the *Theogony* and Pythagoras, Xenophanes, who ridiculed both traditional religion and metempsychosis (DK 21 B 7), and finally Hecataeus, also well known for his critique of common sense (FGrHist 1 F 1). Digressing from the distinctions between them, Heraclitus concentrates on what concerned him most of all: contrasting their method of cognition with his own. Since true insight was available only to Heraclitus, the others were left with πολυμαθίη alone.

There is a long dispute about πολυμαθίη: is it bad as such or just an insufficient means to attain wisdom? Those who prefer the second interpretation often refer to fragment DK 22 B 35: “Men who love wisdom must have knowledge of many things indeed”, which makes problematic condemnation of πολυμαθίη in itself.²⁰ On the contrary, those who see incompatibility in these two fragments explain DK 22 B 35 as being an ironic sneer or as an opinion of οἱ πολλοί.²¹ In view of the other fragments, such as DK 22 B 55, which approves μάθησις, and DK 22 B 95, which criticizes ἀμαθίη, one could say that Heraclitus does not condemn an active acquisition of knowledge *per se*, but contrasts πολυμαθίη with “the wise which is one”, ἐν τὸ σοφόν (DK 22 B 41; it is possible that B 40 and 41 were continuous).²² This kind of wisdom is identified by Heraclitus with knowing the reason, or thought (γνώμη) that *steers* everything and is therefore accessible solely to him.

The other point of debate is the sequence of names in DK 22 B 40, divided by αὐτίς τε into two groups. Traditionally this was explained by chronology: when Heraclitus was writing, Hesiod and Pythagoras were no longer alive; hence their names are juxtaposed.²³ Babut aptly noted that the name of Hesiod is placed at the head of the sentence, in an emphatic position, underlined by the placing of the verb, which separates it intentionally from the others:²⁴ “Polymathie does not teach the intelligence of things, otherwise it is Hesiod whom it would have taught, and Pythagoras, to whom it is possible to add Xenophanes and Hecataeus”. In this rendering αὐτίς τε loses its function of dividing the four names into two opposing groups. In Heraclitus’ view, Hesiod’s poems, including the extensive genealogical *Catalogue of Women*, which was ascribed to him, made him the principal polymath, whereas Pythagoras’ success in the acquisition of knowledge, referred to in DK 22 B 129, brought him closer to Hesiod than to Xenophanes and Hecataeus.

²⁰ See Lesher 1994, 15 n. 29 (with bibliography) and recently Vassallo 2015, 200–202.

²¹ See references in Marcovich 1967/2001, 27 and Granger 2004, 248–250.

²² Kirk 1970, 386–387; Babut 1976, 490–491; Marcovich 1967/2001, 449–453.

²³ Lévy 1927, 2 n. 8; Marcovich 1967/2001, 64–65; Conche 1986, 92.

²⁴ Babut 1976, 493–495.

A different interpretation was put forward by W. Rathmann and W. Burkert: Pythagoras, with Hesiod, has to be treated as representing religious thought, unlike Xenophanes and Hecataeus.²⁵ Recently this view was defended by H. Granger and C. Huffman: “Heraclitus pairs Pythagoras in B 40 with the ancient theologian Hesiod, and sets them apart from Xenophanes and Hecataeus who in their different ways try to abandon the irrationalities of Greek mythology”.²⁶ But did Pythagoras develop “non-Hesiodic mythical teaching about the world and its gods”²⁷ that could be called *πολυμάθεια* and compared to the *Theogony* of Hesiod or the *Genealogies* of Hecataeus?²⁸ The fourth-century tradition ascribes to him claims to remember his previous incarnations, predict future events and understand the language of animals (Arist. fr. 191), but these stories – if they were already known to Heraclitus²⁹ – relate to Pythagoras’ superhuman and extraordinary qualities, which would rather separate him from the other polymaths. Besides, we should bear in mind that unlike Xenophanes, Hecataeus and Heraclitus himself, Pythagoras did not say anything new about gods, whereas his teaching on the immortality and transmigration of the soul was no less innovative and ‘modern’, for example, in its attitude to animal sacrifice, than Xenophanes’ view on a single non-anthropomorphic deity. The examples of Empedocles and Plato demonstrate that it can be easily integrated into philosophical theology.

What brings Xenophanes and Hecataeus together is their openly critical attitude towards the tradition, a characteristic that is not associated with Pythagoras, though he too belonged to the reformers of the traditional Greek religion. As for Heraclitus, his position is far from a clear-cut dichotomy between ‘religion’ and ‘Ionian rationalism’. On the one hand, he ignored Anaximander and Anaximenes and attacked Xenophanes and Hecataeus, on the other, his criticism of Homer and Hesiod did not concern mythology as such; he questioned their wisdom and insight, not that they were not enlightened enough. What was most objectionable about Hesiod? The fact that he did not recognize that day and night are one (DK 22 B 57). No Greek thinker, however rationalistic he might have been, could have

²⁵ Rathmann 1933, 38; Burkert 1972, 210. Rathmann’s general approach to Pythagoras was hypercritical, he even disputed the tradition that Pythagoras taught metempsychosis.

²⁶ Granger 2004, 246. Huffman 2008, 22: “Pythagoras belongs not to the new world of Ionian rationalism represented by Xenophanes and Hecataeus but rather to the mythological view of the world found in Hesiod”.

²⁷ Burkert 1972, 210.

²⁸ Cf. Kahn 2001, 16: “There is no reason to suppose that the great learning ascribed to Pythagoras is limited to theological genealogy in the style of Hesiod”.

²⁹ Some of them were invented later or transferred from Pherecydes to Pythagoras: Zhmud 2012, 62–63.

escaped that kind of criticism. Heraclitus' general attitude towards traditional religion is a matter of controversy, as is almost everything in his oeuvre, but two special studies of this problem, by D. Babut and M. Adomenas, though coming to quite different conclusions, both stress the same point: Heraclitus was neither a reformer of the Greek religion nor an *Aufklärer*.³⁰ It is doubtful, therefore, that a distinction between 'mythology' (which, incidentally, does not appear as such in the preserved fragments as opposed to the various religious practices) and 'Ionian rationalism' was that relevant for him in DK 22 B 40.

It is easy to foresee that Pythagoras' wisdom was also not of the kind acceptable to Heraclitus. In fragment DK 22 B 129 we read: "Pythagoras, the son of Mnesarchus, practised inquiry beyond all other men and having selected these writings made a wisdom of his own: much learning, an imposture".³¹ Here *polymathie* is what really constitutes Pythagoras' wisdom, which, in turn, was attained by *ιστορίη* and the usage of books. Thus, the *contours of Pythagoras' figure*, as they were known to Heraclitus, become more visible to us: he was famous for his wisdom, vast knowledge and intensive intellectual activity. Indeed, what especially distinguishes Pythagoras in Heraclitus' eyes from all the other men is the intensiveness of *ιστορίη* he has undertaken. *ιστορίη* appears only once in Heraclitus, though the above-quoted fragment, *χρὴ γὰρ εὖ μάλα πολλῶν ἱστορᾶς φιλοσόφους ἄνδρας εἶναι* (DK 22 B 35), connects *ιστορίη* with an accumulation of knowledge by those who love wisdom. Over the last century *ιστορίη* has usually been rendered as 'Forschung', 'scientific research' or more neutrally as 'Erkundung', 'inquiry'.³² In any event, *ιστορίη* remains a purposeful cognitive activity of a rational kind, but in order to understand what specifically it refers to we must compare it with Pythagoras' activities.

In itself, *ιστορίη* does not necessarily mean "natural science", asserts Huffman, and *περὶ φύσεως ἱστορία* as the standard designation of the Presocratic

30 Babut 1975, 121: "L'attitude d'Héraclite est donc aussi éloignée que possible de celle d'un réformateur religieux, dont le but serait de corriger certains aspects choquants des croyances ou des pratiques usuelles: en s'appuyant sur deux exemples particulièrement significatifs – sacrifices expiatoires et prières représentent en effet deux aspects essentiels du culte traditionnel – c'est en réalité toute la religiosité populaire qu'il condamne d'un seul coup". Adomenas 1999, 113: "Heraclitus, on the contrary, is not a reformer or an *Aufklärer*, but an interpreter who tries to discern the pattern inherent in the existing practices, and exploit it in the construction of his own philosophical theology".

31 Πυθαγόρης Μνησάρχου ἱστορίην ἥσκησεν ἀνθρώπων μάλιστα πάντων καὶ ἐκλεξάμενος ταύτας τὰς συγγραφὰς ἐποίησατο ἑαυτοῦ σοφίην, πολυμαθίην, κακοτεχνίην.

32 So e. g. Zeller 1910, 459 n. 4: "Erkundigung, Nachfragen bei andern"; Riedweg 2005, 50: "the desire to see, hear, and learn from others". Cf. Marcovich 1967/2001, 68: "scientific inquiry (or research)"; Robinson 1987, 73: "'art of' investigation".

natural philosophy/science appears only in the late fifth century.³³ This is correct, yet the first option for being the main area of Pythagoras' inquiry is not natural science, but rather *mathemata*, as is attested in Aristotle's fragment, which resembles in its structure fragment DK 22 B 129 of Heraclitus: "Pythagoras, the son of Mnesarchus, first dedicated himself to the study of *mathemata*, especially numbers, but later could not refrain from the wonder-working of Pherecydes" (fr. 191).³⁴ Indeed, it was geometry and (mathematical) astronomy, where Thales and Anaximander attained their greatest success (in Thales' case this was attested by Heraclitus: DK 22 B 38), and there is ample evidence both that these sciences were cultivated in the early Pythagorean school and that arithmetic and harmonics were added to them.³⁵ We can live without Pythagoras the natural philosopher, who is hardly perceptible behind the theories even of his immediate followers, Alcmaeon and Hippasus. But without his contributions arithmetic, geometry, mathematical astronomy and harmonics of the early fifth century are left hanging in the air. Thus, it is reasonable to assume that *mathemata* constituted a significant part of Pythagoras' inquiry, or research.

Granger interprets Heraclitus' attitude to everything in which Pythagoras was involved in a resolutely negative way. Polymathie as such is unconditionally condemned by Heraclitus, and Pythagoras' polymathie specifically lies in extensive borrowing from Greek folk wisdom and superstition, exemplified in the Pythagorean *symbola* (Granger prefers to call them *akousmata*, though this term appears only in Iamblichus). Further, ἰστορίη in Heraclitus' eyes is no less objectionable than πολυμαθίη, and his words about "philosophical men" who are obliged to be "inquirers" into many things (DK 22 B 35) are just a mockery of "those parvenus like Pythagoras who pursue 'inquiry'". Pythagoras' ἰστορίη amounts merely to his pursuit of books, whereas his wisdom is a compilation of opinions, based on hearsay and book-learning.³⁶ Huffman develops some of these ideas, especially that of the *symbola* as the principal result of Pythagoras' ἰστορίη. In order to resolve the contradiction between the hearsay learning of Pythagoras and his study of books, he offers several new interpretations. Thus, having analyzed in detail the usage of ἰστορίη in Herodotus, the nearest source to Heraclitus, Huffman comes to the conclusion that it means "the active collection

³³ Huffman 2008, 23–24. See Pl. *Phd.* 96a. Eur. fr. 910 N.

³⁴ Cf. Xenocrates fr. 87 Isnardi Parente: "Pythagoras, Xenocrates says, discovered also that the intervals in music do not come into being apart from number, for they are an interrelation of quantity with quantity. So he set out to investigate under what conditions concordant intervals come about, and discordant ones, and everything well attuned and ill attuned".

³⁵ Zhmud 2012, 239–345.

³⁶ Granger 2004, 241–250.

of what people say on a given topic". Respectively, "Herodotean usage suggests that Heraclitus' audience would have understood him to be saying that Pythagoras was actively engaged in collecting what people say on a number of topics, in making enquiries, and that he created his wisdom out of this hearsay evidence."³⁷ (Probably in order to underline the oral character of Pythagoras' ἱστορίη Huffman renders it throughout his paper invariably as 'enquiry', even in all those cases, where the scholarly texts he quotes have 'inquiry'.³⁸ This is hardly a matter of personal preference, for I did not find 'enquiry' in any other English translation of DK 22 B 129.) Now, Herodotus was necessarily engaged in what we call today 'oral history' and his usage of the written sources was very limited, indeed. It is only natural that his practice of ἱστορίη consisted often in asking other people what they know, though he himself preferred to be an eyewitness. This does not mean, however, that Heraclitus, who wrote earlier, meant by ἱστορίην ἥσκησεν ἀνθρώπων μάλιστα πάντων that Pythagoras was taking a poll of people's opinion (on what subject?) more than all other men. This is improbable in itself and would contradict the entire fifth-century tradition which unanimously stresses Pythagoras' σοφία: a wise man, whether a religious sage or philosopher, does not need to collect hearsay evidence. It is another thing to accuse a famous wise man of his wisdom being derived from συγγραφαί and being in fact nothing more than polymathie.³⁹

In order to progress we must work out what συγγραφαί Heraclitus could have had in mind. συγγραφή normally indicates a prose writing (LSJ, s.v. II.1),⁴⁰ so that Orphic poems, suggested by Rathmann,⁴¹ seem out of place here. Huffman attempted to prove that συγγραφή could mean poetry as well, but adduces no example from the classical literature where συγγραφή refers to poetry and only one, of the mid-fourth century, where σύγγραμμα explicitly refers to both prosaic and poetic works.⁴² His analysis of Herodotean usage does not support his conclusion that "[i]n Herodotus too, a συγγραφή turns out to be something recorded

³⁷ Huffman 2008, 31, 33.

³⁸ Most modern British dictionaries define 'enquiry' as 'the act of questioning' and 'inquiry' as 'investigation'.

³⁹ At the same time, we should not forget "that Heraclitus had practiced inquiry the way Pythagoras had, or was a well read person" (Mansfeld 1990, 445).

⁴⁰ Marcovich 1967/2001, 69; Kahn 1979, 113; Conche, 1986, 106.

⁴¹ Rathmann 1933, 93; Burkert 1972, 131, 210.

⁴² Pl. *Leg.* 858d; Huffman 2008, 36–38. His example with συγγράφω in Aristotle (*EE* 1214a1–4) proves the opposite, for here Aristotle first says that someone composed an inscription (συνέγραψε) for the propylaeum of the temple of Leto, then conveys its content, and finally quotes it, introducing the verses with ποιήσας.

in writing, but it is clear that the writing can be either in prose or in verse”.⁴³ The only example of συγγραφή (Hdt. 1.93) refers to ‘recording’ or ‘writing down’ the marvels of Lydia (see LSJ, s.v. I), whereas συγγράφω in those two cases where it is related to the oracles in verses (Hdt. 1.47–48; 7.141) obviously means ‘to write or note down’ (LSJ, s.v. I) and not ‘to compose a work in writing, especially in prose’ (LSJ, s.v. II). The verses were composed not by those envoys who wrote them down.⁴⁴ Since ταύτας τὰς συγγραφάς in DK 22 B 129 denote rather ‘written compositions, books’ than just something which was ‘written down’ but composed by the other people, this seriously limits the possibilities of seeing in them religious poetry. Among the prose writings that we know of the only one with religious content is that of Pythagoras’ alleged teacher Pherecydes; the others are either of a philosophical nature, such as the treatises of Anaximander and Anaximenes, or devoted to special fields of knowledge. To this category belong technical treatises by the architects Chersiphron and Metagenes of Crete and Theodorus of Samos, the work on music by Lasus of Hermione, the interpretation of the Homeric poems by Theagenes of Rhegium, the voyages of Scylax of Caryanda and Euthymenes of Massalia.⁴⁵ Kahn rightly points out that this is only a small portion of what existed in the sixth century.⁴⁶

Indeed, Thales’ geometry must have reached Italy in a written form, even if we do not have direct evidence for this. It is worth recalling, however, that Aristotle’s student Eudemus of Rhodes says in his *History of Geometry* that Thales “was the first to notice and assert that in every isosceles the angles at the base are equal, though in somewhat archaic fashion he called the ‘equal’ angles ‘similar’” (ἀρχαϊκώτερον δὲ τὰς ἴσας ὁμοίας προσειρηκέναι).⁴⁷ Obviously, Eudemus relied on an early geometrical text, at least earlier than Hippocrates of Chios (ca. 430 BC), who called the equal angles ἴσας,⁴⁸ where theorems attributed to Thales

⁴³ Huffman 2008, 40.

⁴⁴ Contrary to Huffman’s contention (2008, 40), most of the oracles were written not in verses but in prose, as was convincingly demonstrated by J. Fontenrose (1978, 174, 193–195).

⁴⁵ Technical treatises (Vitr. VII, praef. 12); Lasus (18 A 3; Aristox. *Harm.* 7.19 f.); Theagenes (8 A 2); Scylax (FGrHist 709); Euthymenes (FHG IV, 408).

⁴⁶ Kahn 2003, 152.

⁴⁷ Procl. in *Eucl.* 251.2, trans. Glenn R. Morrow. The Eudemian origin of these words is widely accepted; for references see Panchenko (1994) 37 n. 25. In the case of Oenopides of Chios (ca 450) Eudemus was also sensitive to problems of terminology: Oenopides calls the perpendicular in the archaic manner gnomon-wise (ὀνομάζει δὲ τὴν κάθετον ἀρχαϊκῶς κατὰ γνώμωνα), since the gnomon also stands at right angles to the horizon (Procl. in *Eucl.* 283.7 f.). See Zhmud (2006), 171, 200.

⁴⁸ *Fr.* 140, p. 60. 6 Wehrli. See Panchenko 1994, 37 ff.

were written down. Eudemus refers to four of them.⁴⁹ Such or a similar text could have been available to Heraclitus too. On the other hand, there is no reason to suppose that Heraclitus had in mind Babylonian mathematical treatises,⁵⁰ for who would call συγγραφαί the small clay tablets with absolutely unintelligible signs on them?

ἐκλεξάμενος ταύτας τὰς σύγγραφάς seems to mean ‘having selected these writings’ rather than ‘having selected from (or of) these writings’,⁵¹ while ταύτας may refer to something outside of the fragment. Huffman, following M. West, takes ταύτας to indicate that the συγγραφαί were notorious in some way. Further, though he suggests that “Heraclitus could have used συγγραφαί to refer to anything written up, whether in poetry or in prose”,⁵² it is not religious poetry that he finds in the συγγραφαί. Relying mainly on the late fifth and early fourth centuries’ Athenian usage of συγγραφή as decree, covenant, contract, bond etc. (LSJ, s.v. II.2), he argues that Heraclitus more likely was referring not to book-length writings or treatises but to “short records of information of some sort”. It turns out, then, that these συγγραφαί could be even one sentence long, in which case it is easy to identify them with the Pythagorean sayings known as *symbola*.

The following picture develops: Pythagoras widely travels asking different authorities about various important things – What is an earthquake? What is wisest? Should we walk on public roads?, – memorizes their answers – that an earthquake is a gathering of the dead, that the wisest is the number and that we should not walk on public roads – then somebody else writes up a collection of these *symbola* and thus they become the συγγραφαί referred to by Heraclitus. “Heraclitus may be saying something like this to his reader”, writes Huffman: “You know these things of Pythagoras that have been written up and are in circulation – he just selected them out of his extensive enquiries into the views of other people.”⁵³

All this, however, is not convincing. συγγραφή cannot mean a saying of one sentence long; any decree or marriage contract, however short, constitutes a complete text. An oral σύμβολον which is written up remains a σύμβολον and does not become a συγγραφή.⁵⁴ The earliest collection of the *symbola* that we

⁴⁹ Zhmud (2006), 170, 191 f.

⁵⁰ Marcovich 1967/2001, 69.

⁵¹ DK 22 B 129; Kahn 1979, 309 n. 79; Barnes 1982, 146; Robinson 1987, 73; Huffman 2008, 35.

⁵² Huffman 2008, 41.

⁵³ Huffman 2008, 43.

⁵⁴ Cf. the *symbola* on the fourth century BC Orphic tablet: σύμβολα. Ἀνδρικοπαίδοθυρσον. Ἀνδρικοπαίδοθυρσον. Βριμώ. Βριμώ. εἴσιθ<ι> ἱερὸν λειμῶνα. ἄποινος γὰρ ὁ μύστης (Bernabé 2005, 72, fr. 493).

know of was compiled around 400 BC by a Milesian Sophist Anaximander the Younger, and its Pythagorean origin is guaranteed only by its title, Συμβόλων Πυθαγορείων ἐξήγησις (58 C 6).⁵⁵ But even in Anaximander these sayings are called the Pythagorean, not Pythagoras' *symbola*. Indeed, not a single *symbolon* from Anaximander's collection preserved by Aristotle (fr. 194–195) was related to Pythagoras in the fifth-century tradition. This makes the existence of a collection of the *symbola* written in the time of Heraclitus and available only to him highly improbable. Nothing that we know of early Pythagoreanism allows us to assume the existence of any authoritative religious text emanating from Pythagoras.⁵⁶ And how would Heraclitus recognise that the συγγραφαί, which constitute the results of Pythagoras' ἱστορίη and the essence of his wisdom, are written by somebody else, since Pythagoras – as we know – did not write anything?

I now come to σοφίη. Heraclitus asserts that the wisdom of Pythagoras achieved through research and the accumulation of knowledge from books is no less seeming than the wisdom of Homer. In reality it is πολυμαθίη and κακοτεχνίη. But if we look at it against the background of the entire early tradition, Pythagoras' σοφία becomes his most conspicuous trait. It is noted by Herodotus (4.95) and Empedocles (DK 31 B 129), the philosophising poet Ion of Chios (DK 36 B 40), Antisthenes (fr. 51 Decleva Caizzi) and the Sophist Alcidas (DK 14 A 5). Especially close to Heraclitus's words is Ion's elegy to Pherecydes, who “even in death has a life which is pleasing to his soul, if Pythagoras the wise truly achieved knowledge and understanding beyond that of all men” (εἴπερ Πυθαγόρης ἐτύμως σοφός, ὃς περὶ πάντων ἀνθρώπων γνώμας εἶδε καὶ ἐξέμαθεν, DK 36 B 4, trans. Kenneth Dover).⁵⁷ Often these words are seen as a polemic with Heraclitus, defending Pythagoras' wisdom.⁵⁸ The context of most other testimonies is similar: they point to the outstanding intellectual abilities of Pythagoras and his vast knowledge. It makes no sense to argue against this knowledge being connected with the sphere of religion; what is important to us is that it was not restricted to that sphere. Neither the miracles of Pythagoras nor his preaching of metempsychosis could alone establish his reputation as a wise man.

ἱστορίη, συγγραφαί, σοφίη and πολυμαθίη taken together imply that Pythagoras' κακοτεχνίη should be at the same theoretical level, whereas κοπίδες in DK 22 B 81 refer rather to his social activities. The usual meaning of κακοτεχνίη is

⁵⁵ See Zhmud 2012, 192–206.

⁵⁶ Burkert 1972, 219–220.

⁵⁷ See Dover 1988. For the meaning of γνώμη, cf. Heraclitus DK 22 B 41 and 78; Anaxagoras DK 59 B 12; Democritus DK 68 B 11. Snell 1924, 31–32 stresses the double meaning of γνώμη as cognition and its result.

⁵⁸ See e. g. Marcovich 1967/2001, 67–68; Dover 1988, 4–5.

‘base artifice, falsification, charlatanism’; the legal sense is ‘bribing of a witness to give false testimony evidence’ (LSJ, s.v.), which is to say something connected with fraud. By itself *κακοτεχνία* nowhere implies religious imposture, so Burkert’s suggestion to see here “a ritually enacted *katabasis* of Pythagoras” did not win much support.⁵⁹ Huffman proposes a rather gloomy interpretation of *κακοτεχνία*: it refers “to the Pythagorean society as a conspiracy, which is based on false testimony about the Pythagorean doctrine of the immortality and transmigration of the soul”.⁶⁰ I doubt very much that any reader of Heraclitus could extract from *κακοτεχνία* such a meaning. Certainly, Pythagoras’ claims of immortality and an ability to do wonders could not have been to Heraclitus’ liking, but the Pythagorean society was a political organisation, and no Pythagorean known to us by name is connected with transmigration of the soul. There were suggestions that *κακοτεχνία* is an accusation of appropriation of the thoughts of others, but I am not sure that we can narrow down the general meaning of this word in DK 22 B 129 with certainty.⁶¹ At any rate, whatever specific meaning Heraclitus imparted to *κακοτεχνία*, it provides only an additional nuance to his radical denial of any significance one should attach to everything said by his archrival Pythagoras of Samos.

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⁵⁹ Burkert 1972, 161. Cf. Marcovich 1967/2001, 70.

⁶⁰ Huffman 2008, 44.

⁶¹ Cf. Marcovich 1967/2001, 70.

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Abstract

Heraclitus is known for his critical attitude towards his predecessors. Almost every author mentioned by him – Homer, Hesiod and Archilochus, Xenophanes and Hecataeus – attract their share of opprobrium. Among the early Greek thinkers only Thales seemed to appear in a neutral context (DK 22 B 38). Judging by the preserved evidence, Pythagoras was the principal target of Heraclitus' attacks, for the Samian sage is mentioned in three different fragments, every time very crucially. In DK 22 B 129 Heraclitus claims that Pythagoras' wisdom is in fact a polymathy and an imposture, B 40 says that Pythagoras' polymathy did not teach him understanding (νόον), and B 81 calls Pythagoras "originator, ancestor of swindles". The force of Heraclitus' attacks on Pythagoras demonstrates that he possibly saw in him his chief rival, but how this has to be explained? What was the area in which their interests and competences have crossed? Heraclitus was the first to note the dual nature of the figure of Pythagoras, cf. ἱστορίη and κακοτεχνίη in DK 22 B 129. On what evidence did he rely? This article tries to answer these and several related questions.

